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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|------------------------------------|----------------------|---------------------|------------------|
| 10/698,685 | 10/30/2003 | Michael Harville | 200313422-1 | 3564 |
| 22879 759 HEWLETT PACE | 0 12/20/2006 XARD COMPANY | EXAMINER | | |
| P O BOX 272400 | , 3404 E. HARMONY I | ALAM, UZMA | | |
| FORT COLLINS, | , PROPERTY ADMINI CO 80527-2400 | STRATION | ART UNIT | PAPER NUMBER |
| | | | 2157 | |
| SHORTENED STATUTORY P | ERIOD OF RESPONSE | MAIL DATE | DELIVER | Y MODE |
| 3 MONT | HS | 12/20/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| | 10/698,685 | HARVILLE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Uzma Alam | 2157 | | | | |
| The MAILING DATE of this communication app | pears on the cover sheet with the | correspondence address | | | | |
| Period for Reply | | • | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO | ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 21 Se | eptember 2006. | | | | | |
| | _ | | | | | |
| 3) Since this application is in condition for allowar | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | Ex parte Quayle, 1935 C.D. 11, | 453 O.G. 213. | | | | |
| Disposition of Claims | | • | | | | |
| 4)⊠ Claim(s) <u>1 and 36-74</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | · | | | | |
| 6) Claim(s) 1, 36-74 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | , | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | ır. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is | objected to. See 37 CFR 1.121(d). | | | | |
| 11) ☐ The oath or declaration is objected to by the Ex | caminer. Note the attached Office | ce Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | · . | | | | | |
| | priority under 35 H.S.C. 8 119 | (a)-(d) or (f) | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau | J (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not recei | ved. | | | | |
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| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summa | ary (PTO-413) | | | | |
| 2) DNotice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail | Date | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other: | | | | | | |

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DETAILED ACTION

This action is responsive to the amendment filed on September 21, 2006. Claims 1, 36-74 are pending. Claims 1, 51, 52 and 54 have been amended. Claims 1, 36-74 represent a method for managing a streaming media service.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1 and 36-74 rejected under 35 U.S.C. 102(e) as being anticipated by Kenner et al. US Patent No. 6,665,706. Kenner teaches the invention as claimed including a system for optimized retrieval of video data (see abstract).

As per claim 1, Kenner teaches a method for managing a streaming media service, said method comprising:

receiving a request for a streaming media service from a client, said streaming media service comprising a media service component (client (12) requests data from MSP (32); column 7, lines 1-15, lines 60-67; column 8, lines 1-5);

selecting a service location manager to which to provide said request from a plurality of service location managers, said service location manager configured for selecting a service

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provider from a plurality of service providers (using a MSP to select a service provider; column 7, lines 63-67, column 8, lines 1-5);

selecting said service provider to which to assign said media service component from a plurality of service providers of a network (selecting a content provider; column 12, lines 36-42);

informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on streaming media (sending stream to client after quality of service standards are met; column 13, lines 1-10);

using information to determine whether to initiate a handoff of said streaming media service from said service provider to another service provider; and if it is determined to initiate said handoff, initiating said handoff (if one content provider does not provide the required information at the required quality of service, getting information from a mirror site; column 13, lines 11-60).

As per claim 36, Kenner teaches the method as recited in claim 1, wherein said information comprises information received from said service providers and information associated with location and priority of said service providers (column 13, lines 36-42).

As per claim 37, Kenner teaches the method as recited in claim 1, wherein said information comprises information received from any client device that is involved in said streaming media service (the user send relevant information through the MSP for the required

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service it is requesting; column 8, lines 43-49; column 9, lines 46-55).

As per claim 38, Kenner teaches the method as recited in claim 1, wherein said information comprises information associated with network conditions (column 11, lines 37-49).

As per claim 39, Kenner teaches the method as described in claim 1, wherein said selecting said service location manager comprises: maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers; and selecting said service location manager in a round robin manner from said record (having a database of content providers that provide the required data and their resources; column 13, lines 26-58).

As per claim 40, Kenner teaches the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of available resources of a first set of service providers supervised by a first service location manager and available resources of a second set of service providers supervised by a second service location manager (column 11, lines 37-49; column 13, lines 11-25).

As per claim 41, Kenner teaches the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of processing loads of at least two service location managers among said plurality of service location managers (column 13,

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lines 11-25).

As per claim 42, Kenner teaches the method as described in claim 1, wherein said selecting said service location manager is based on an estimate of a network communication condition between two entities connected by the network (column 11, lines 37-49).

As per claim 43, Kenner teaches the method as described in claim 1, further comprising: notifying a second service location manager among said plurality of service location managers of the assignment of said service provider to perform said media service component (column 13, lines 11-25).

As per claim 44, Kenner teaches the method as described in claim 1, wherein said service provider is supervised by more than one service location manager among said plurality of service location managers (column 8, lines 1-5).

As per claim 45, Kenner teaches the method as described in claim 44, further comprising: maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider; and notifying said set of service location managers according to said record of said assignment of said service provider to perform said media service component (column 13, lines 26-58).

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As per claim 46, Kenner teaches the method as described in claim 1, further comprising: receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements; and said selecting said service provider based on said resource availability information (column 8, lines 43-49).

As per claim 47, Kenner teaches the method as described in claim 46, wherein said resource availability information is pushed from said plurality of service providers (column 12, lines 43-60; column 16, lines 14-20).

As per claim 48, Kenner teaches the method as described in claim 46, wherein said receiving resource availability information occurs in response to polling of said service providers (column 12, lines 43-60).

As per claim 49 Kenner teaches the method as described in claim 1, wherein said selecting said service provider is based on static service provider information or static network information (column 13, lines 26-58).

As per claim 50, Kenner teaches the method as described in claim 49, wherein said static service provider information or static network information consists of at least one of the following: information concerning computational and memory resources, connectivity and expected bandwidth and latency between servers, client and content addresses, session dispatch

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history, and network proximity (column 12, lines 43-60).

As per claim 51, Kenner teaches the method of claim 1, wherein said selecting said service provider comprises: maintaining a record comprising assignments of service providers to perform media service components; and said selecting said service provider based on said record (column 13, lines 26-58).

'As per claim 52, Kenner teaches the method of claim 1, wherein said selecting said service provider comprises: maintaining a record comprising assignments of service providers to perform media

service components (column 13, lines 26-59);

receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements (column 12, lines 43-60); and

said selecting said service provider based on said resource availability information and said record (column 13, lines 11-25).

As per claim 53, Kenner teaches the method as described in claim 1, wherein said selecting said service provider is based on an estimate of resources associated with performing said service (column 13, lines 26-58).

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3. Claims 54-60 disclose a computer readable medium comprising computer-executable instructions stored thereon for implementing a method and are rejected under the same rationale as claims 1, 36-53 which teach the method.

As per claim 61, Kenner teaches a system for providing streaming content to a client device, said system comprising:

a plurality of service location managers, each service location manager capable of managing a handoff of a service based on information received (column 12, lines 36-42; column 13, lines 1-60);

a plurality of service providers, each service provider capable of performing said service on an item of streaming input content to produce said streaming content (column 7, lines 1-15, lines 60-67; column 8, lines 1-5); and

a portal providing a first point of contact for said client device, said portal for receiving from said client device a request for performance of said service on said item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider of said assignment to perform said service on said streaming input content to produce said streaming content, wherein said service location manager uses information to determine whether to initiate a handoff of said service from said service provider to another service provider (column 12, lines 36-42; column 13, lines 11-60).

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As per claim 62, Kenner teaches the system of claim 61, wherein said information includes information received from said service providers (column 13, lines 26-58).

As per claim 63, Kenner teaches the system of claim 61, wherein said information includes information received from said client device (column 8, lines 43-49; column 9, lines 46-55).

As per claim 64, Kenner teaches the system of claim 61, wherein said information includes information associated with network conditions (column 11, lines 37-49).

As per claim 65, Kenner teaches the system of claim 61, wherein said portal maintains a record comprising a prioritized listing of at least one service location manager among said plurality of service location managers and selects said service location manager in order of priority according to said prioritized listing (column 11, lines 37-49; column 13, lines 11-25).

As per claim 66, Kenner teaches the system of claim 61, wherein said portal selects said service location manager by comparing available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (column 13, lines 11-25).

As per claim 67, Kenner teaches the system of claim 61, wherein said portal selects said service location manager based on an estimate of a network communication condition between

two entities connected by the network (column 11, lines 37-49).

As per claim 68, Kenner teaches the system of claim 61, wherein said service provider or said service location manager notifies a second service location manager among said plurality of service location managers of said assignment of said service provider to perform said service (column 13, lines 11-25).

As per claim 69, Kenner teaches the system of claim 61, wherein said portal activates a second service location manager of said plurality of service location managers to perform the operation of said service location manager, provided said portal determines said service location manager to be non-responsive (column 14, lines 10-26).

As per claim 70, Kenner teaches the system of claim 61, wherein said service provider is supervised by more than one service location manager of said plurality of service location managers (column 8, lines 1-5).

As per claim 71, Kenner teaches the system of claim 61, wherein said service provider is supervised by a first service location manager, and wherein said first service location manager transfers supervision of said service provider to a second service location manager (column 14, lines 10-26).

As per claim 72, Kenner teaches the system of claim 61, wherein said service location manager receives resource availability information from said plurality of service providers, and wherein said selecting said service provider is based on said resource availability information (column 13, lines 26-58).

As per claim 73, Kenner teaches the system of claim 61, wherein said service location manager maintains a record comprising assignments of service providers to perform services, and wherein said selecting said service provider is based on said record (column 13, lines 26-58).

As per claim 74, Kenner teaches the system of claim 61, wherein said service location manager selects said service provider based on static service provider information or static network information (column 13, lines 26-58).

Response to Arguments

- 4. Applicant's arguments filed September 21, 2006 have been fully considered but they are not persuasive.
- 5. Applicant argues:
- 6. A) The Kenner reference does not teach or suggest the limitation of "receiving a request for a streaming media service from a client, said streaming media service comprising a media service component," as recited in claim 1.
- 7. B) The Kenner reference does not teach "selecting a service location manager to which to provide said request from a plurality of service location managers, said service location manager

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configured for selecting a service provider from a plurality of service providers" and "selecting said service provider to which to assign said media service component from a plurality of service providers of a network," as recited in Claim 1.

- 8. C) The Kenner reference does not teach "informing said service provider of said assignment to perform said media service component" and "using information to determine whether to initiate a handoff of said streaming media service from said service provider to another service provider" and "if it is determined to initiate said handoff, initiating said handoff," as recited in Claim 1.
- 9. In response to A) Kenner teaches a system of nodes. The nodes provide many services, including video streaming, see column 7, line 62-65. Kenner teaches that the type of data provided by the nodes of the reference can include stream and stream services. Kenner also teaches optimizing the transmission of the data, which is a service performed on the data. The optimization of the data is taught in Kenner in column 7, lines 40-46.
- 10. In response to B) Kenner teaches mirror sites that provide the service provided by another node when one node cannot provide the service. See column 7, lines 66-67, column 8, lines 1-5, column 13, lines 40-47 and column 14, lines 39-58.
- 11. In response to C) Kenner teaches mirror sites that provide the service provided by another node when one node cannot provide the service. Kenner also teaches that the configuration utility provides for the change of node in the server. It oversees what node should be the mirror site and that it can optimally perform all the services of the original node. See column 7, lines 66-67, column 8, lines 1-5, column 13, lines 40-47 and column 14, lines 39-58.

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Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Tuesday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam Ua December 8, 2006

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